SEQUENCE LISTING

```
<110> MUIR, TOM W.

COLE, PHILIP A

FRIEDMAN, JEFFREY M.

SONDHI, DOLAN

SEVERINOV, KONSTANITINE
```

<120> METHODS OF LIGATING EXPRESSED PROTEINS

<130> 600-1-214CIPB

<140> 09/191,890

<141> 1998-11-13

<150> 60/065,391

<151> 1997-11-13

<150> 60/093,990

<151> 1998-07-24

<160> 11

<170> PatentIn Ver. 2.0

<210> 1

2112

<211> 162

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: generated by ligation of two proteins under certain conditions

<400> 1

Met Leu Phe Val Ala Leu Tyr Asp Phe Val Ala Ser Gly Asp Asn Thr 1 5 10. 15

Leu Ser Ile Thr Lys Gly Glu Lys Leu Arg Val Leu Gly Tyr Asn His 20 25 30

Asn Gly Glu Trp Ala Glu Ala Gln Thr Lys Asn Gly Gln Gly Trp Val
35 40 45

Pro Ser Asn Tyr Ile Thr Pro Val Gly Cys Leu Glu Lys His Ser Trp 50 55 60

Tyr His Gly Pro Val Ser Arg Asn Ala Ala Glu Tyr Leu Leu Ser Ser

Gly Ile Asn Gly Ser Phe Leu Val Arg Glu Ser Glu Ser Ser Pro Gly
85 90 95

Gln Arg Ser Ile Ser Leu Arg Tyr Glu Gly Arg Val Tyr His Tyr Arg 100 105 110

Ile Asn Thr Ala Ser Asp Gly Lys Leu Tyr Val Ser Ser Glu Ser Arg 115 120 125

Phe Asn Thr Leu Ala Glu Leu Val His His His Ser Thr Val Ala Asp 130 135 140

Gly Leu Ile Thr Thr Leu His Tyr Pro Ala Pro Lys Arg Gly Ile His 145 150 155 160

Arg Asp

65

<210> 2

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

12

4,4

<223> Description of Artificial Sequence: Model peptide
 synthesized by solid phase peptide synthesis.

<220>

<221> SITE

<222> (11)

<223> Xaa(position 11) is aminocaproate.

<220>

<223> C-terminal K has a fluorescein moiety off the E-NH2 group.

<400> 2

Cys Glu Asp Asn Glu Tyr Thr Ala Arg Glu Xaa Lys

<210> 3

<211> 12

<212> PRT

<213> Artificial Sequence

```
<220>
    <223> Description of Artificial Sequence: Model peptide
          synthesized by solid phase peptide synthesis.
    <220>
    <221> SITE
    <222> (11)
    <223> Xaa(position 11) is aminocaproate.
    <400> 3
    Cys Glu Asp Asn Glu Tyr Thr Ala Arg Glu Xaa Lys
      1
                      5
                                          10
    <210> 4
    <211> 8
    <212> PRT
    <213> Artificial Sequence
    <220>
    <223> Description of Artificial Sequence: Model peptide
          synthesized by solid phase peptide synthesis.
    <220>
81 tm
s:sk
    <223> K has a fluorescein moiety off the E-NH2 group; C-
          terminus is an amide group.
    <400> 4
Cys Gly Arg Gly Arg Lys
                      5
      1
<210> 5
    <211> 8
    <212> PRT
    <213> Unknown
    <220>
    <223> Description of Unknown Organism: ligand
    <400> 5
    Pro Val Pro Tyr Glu Asn Val Gly
      1
                      5
    <210> 6
    <211> 11
```

ij

```
<212> PRT
    <213> Artificial Sequence
    <220>
    <223> Description of Artificial Sequence: Model peptide
          synthesized by solid phase peptide synthesis.
    <220>
    <223> C-terminus is an amide group.
    <400> 6
    Pro Pro Ala Tyr Pro Pro Pro Pro Val Pro Lys
                      5
    <210> 7
    <211> 42
    <212> DNA
    <213> Artificial Sequence
    <220>
    <223> Description of Artificial Sequence: synthetic
          oligonucleotide
ar, iz
    <400> ブ
    ccggtcatcg aaggtcgttg cctggagaaa cattcctggt at
    <210> 8
<211> 41
    <212> DNA
    <213> Artificial Sequence
    <220>
    <223> Description of Artificial Sequence: synthetic
          oligonucleotide
    <400> 8
    catgatacca ggaatgtttc tccaggcaac gaccttcgat g
    <210> 9
    <211> 5
    <212> PRT
    <213> Artificial Sequence
    <220>
```

42

41

<223> Description of Artificial Sequence: motif within

linker region

<400> 9	
Ile Glu Gly Arg Cys	
1 5	
<210> 10	
<211> 45	
<212> DNA	
<213> Artificial Sequence	
·	
<220>	
<223> Description of Artificial Sequence: synthetic	
oligonucleotide	
<400> 10	
ggatcccctg gtcatatgct ttttgtggca ctctatgatt ttgtg	45
<210> 11	
<211> 42	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: synthetic	
oligonucleotide	
.400. 11	
<400> 11	40
atgtttctcc aggctgttaa cgggggtgat gtagttgctt gg	42